

Appln. No. 10/787,516

Attorney Docket No. 10544-288

I. Listing of the Claims

1. through 35. (Cancelled)

36. (Currently amended) An x-ray reflective optic comprising:

an ~~optic~~ optical element which conditions an x-ray beam, the ~~optical element~~ optic defining a near end and a far end and including a first optical element defining a first reflective surface and a second optical element defining a second reflective surface orthogonal to the first reflective surface, the first and second reflective surfaces reflecting x-rays transmitted from an x-ray source; and an aperture ~~attached to the far end of the optical element, the aperture being adjusted to adjust the~~ which adjusts convergence of the x-ray beam by selecting a portion of the x-ray beam delivered by the optical element.

37. (Original) The x-ray reflective optic of claim 36 wherein the aperture is a diaphragm.

38. (Original) The x-ray reflective optic of claim 36 wherein the aperture includes a fixed portion and a movable portion that is movable relative to the fixed portion, the aperture being adjusted by moving the movable portion relative to the fixed portion.

39. (Currently amend) The x-ray reflective optic of claim ~~36~~ 38 wherein the fixed portion is a slit and the movable portion is a blade that moves across the slit.40. (Currently amended) The x-ray reflective optic of claim ~~36~~ 38 wherein the fixed portion is a pinhole and the movable portion is a blade that moves across the pinhole.

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41. (Currently amended) The x-ray reflective optic of claim ~~36~~ 38 wherein the fixed portion is a fixed blade and the movable portion is a movable blade.

42. (Original) The x-ray reflective optic of claim 36 wherein the optical element is a two-dimensional optical element.

43. (New) The x-ray reflective optic of claim of claim 36 wherein at least one reflective surface has a substantially elliptic shape.

44. (New) The x-ray reflective optic of claim 43 wherein both reflective surfaces have a substantially elliptic shape.

45. (New) The x-ray reflective optic of claim 43 wherein one reflective surface has a substantially elliptic shape and the other reflective surface has a substantially parabolic shape.

46. (New) The x-ray reflective optic of claim 36 wherein at least one reflective surface has a substantially parabolic shape.

47. (New) The x-ray reflective optic of claim 46 wherein both reflective surfaces have a substantially parabolic shape.

48. (New) The x-ray reflective optic of claim 41 wherein the fixed blade and the movable blade are positioned at or near ~~the~~ a distal portion of the x-ray reflective optic relative to the source.

49. (New) The x-ray reflective optic of claim 41 wherein the fixed blade and the movable blade are each substantially L-shaped.



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50. (New) The x-ray reflective optic of claim 41 wherein the movable blade is movable from a high-convergence position to a low-convergence position.

51. (New) The x-ray reflective optic of claim 50 wherein in the low-convergence position, the movable blade occludes x-rays reflected from a far portion of the x-ray reflective optic.

52. (New) The x-ray reflective optic of claim 36 wherein the first optical element is a first multilayer optic and the second optical element is a second multilayer optic.

53. (New) The x-ray reflective optic of claim 52 wherein the first multilayer optic and the second multilayer optic have graded d-spacing.

54. (New) The x-ray reflective optic of claim 53 wherein the first multilayer optic and the second multilayer optic have depth graded d-spacing.

55. (New) The x-ray reflective optic of claim 53 wherein the first multilayer optic and the second multilayer optic have laterally graded d-spacing.

56. (New) The x-ray reflective optic of claim 36 wherein the first optical element is a first x-ray reflective crystal and the second optical element is a second x-ray reflective crystal.

57. (New) The x-ray reflective optic of claim 36 wherein the aperture is positioned between the source and the first and second optical elements.

58. (New) The x-ray reflective optic of claim 36 wherein the aperture is attached to the far end of the optic.



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59. (New) The x-ray reflective optic of claim 36 wherein the aperture is attached to the near end of the optic.



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